

### **Amendment to the Claims**

This listing of claims will replace all prior versions, and listings, of claims in the application.

### **Listing of Claims**

1-5. Canceled

6. (currently amended) A method for the diagnosis of a pathological condition in a human subject characterized a) by the overexpression of a neurotrophic factor or b) by the underexpression of a neurotrophic factor, said neurotrophic factor being ~~selected from the group consisting of BDNF (SEQ ID NO: 42), NT-3 (SEQ ID NO: 43), NT-4 (SEQ ID NO: 44) and NT-4/5 (SEQ ID NO: 45), said neurotrophic factor being capable of binding a human trkB receptor polypeptide comprising SEQ ID NO:2 or SEQ ID NO:4 or an immunoadhesin thereof,~~ said method comprising:

(a) contacting a biological sample obtained from said human subject with a detectably labeled human trkB receptor polypeptide comprising SEQ ID NO:2 or SEQ ID NO:4, or an immunoadhesin thereof capable of binding said neurotrophic factor, and

(b) detecting the presence of said neurotrophic factor by monitoring the binding of said detectably labeled human trkB receptor polypeptide comprising SEQ ID NO:2 or SEQ ID NO:4, or an immunoadhesin thereof, to said neurotrophic factor,

wherein said pathological condition is selected from the group of pathological conditions consisting of a malignancy, a pancreatic disorder, a psychiatric disorder, and aberrant sprouting in epilepsy, and

wherein said subject is diagnosed with said pathological condition if said neurotrophic factor is either a) overexpressed in said sample, or b) underexpressed in said sample, as compared to the expression of said neurotrophic factor measured in a sample from a normal subject.

7. (previously presented) The method of claim 6 wherein said pathological condition is a malignancy.

8. (previously presented) The method of claim 7 wherein the pathological condition is a tumor overexpressing said neurotrophin.

9. (withdrawn) The method of claim 6 wherein said biological sample is from the pancreas, and the disorder is a pancreatic disorder.

10. (withdrawn) The method of claim 6 wherein said pathological condition is aberrant sprouting in epilepsy.

11. (withdrawn) The method of claim 6 wherein said pathological condition is a psychiatric disorder.

12. (canceled)